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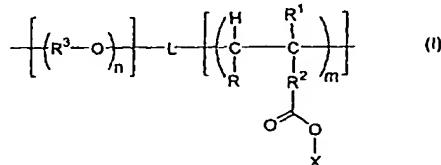
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(54) Title: BLOCK COPOLYMERS



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(57) Abstract: Novel block copolymers are described, together with the production therefrom of physiologically soluble polymer therapeutics. The block copolymers have the general formula (1) wherein R is selected from the group consisting of hydrogen, C₁-C₁₈ alkyl, C₂-C₁₈ alkenyl, C₇-C₁₈ aralkyl, C₇-C₁₈ alkaryl, C₆-C₁₈ aryl, carboxylic acid, C₂-C₁₈ alkoxycarbonyl, C²-C₁₈ alkaminocarbonyl, or any one of C₁-C₁₈ alkyl, C₂-C₁₈ alkenyl, C₇-C₁₈ aralkyl, C₇-C₁₈ alkaryl, C₆-C₁₈ aryl, C₂-C₁₈ alkoxycarbonyl and C₂-C₁₈ alkaminocarbonyl substituted with a heteroatom within, or attached to, the carbon backbone; R¹ is selected from the group consisting of hydrogen and C₁-C₆ alkyl groups; R² is a linking group; X is an electron withdrawing group; R³ is selected from the group consisting of C₁-C₁₈ alkylene, C₂-C₁₈ alkenylene, C₇-C₁₈ aralkylene, C₇-C₁₈ alkarylene and C₆-C₁₈ arylene; L is a divalent linker joining the blocks; and m and n are each an integer of greater than 1.

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INTERNATIONAL SEARCH REPORT

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PCT/GB 02/05932

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C08F293/00 A61K31/00 C08F20/36 C08F4/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 18080 A (BROCCINI STEPHEN JAMES ; GODWIN ANTONY (GB); UNIV LONDON PHARMACY) 15 March 2001 (2001-03-15) cited in the application * page 18, line 9-10, 14-15 (particularly polyethylene glycol) ; page 26, line 8-9 ; claims 1-38 ; examples * page 17, line 7 -page 28, line 15 ---	1-7,11
X	US 6 235 813 B1 (SILBER STEFAN ET AL) 22 May 2001 (2001-05-22) * claim 1 ; column 3, line 25 ; column 2, line 40 - column 3, line 29 ; claims 9, 2-19 ; examples * column 5, line 66 -column 6, line 57 --- -/-	1-7,11

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 248 839 B1 (KNEBELKAMP ARNO ET AL) 19 June 2001 (2001-06-19) * claim 1 ; column 2, line 25 - column 4, line 8 ; examples * ---	1-7,11
X	WO 01 17515 A (BROCCHINI STEVEN JAMES ;CLOCHEARD MARIE CLAUDE DUBOIS (GB); UNIV LO) 15 March 2001 (2001-03-15) * claims 8, 9, 17-22, 1-16 ; page 9, line 19 - page 23, line 10 ; examples * ---	1-7,11
A	DE 31 31 848 A (GOLDSCHMIDT AG TH) 24 February 1983 (1983-02-24) abstract; claims 1-12 ---	1-7,11
A	US 6 162 882 A (MATYJASZEWSKI KRZYSZTOF ET AL) 19 December 2000 (2000-12-19) * column 1, line 25-28 ; column 2, line 65 - column 3, line 8 ; column 9, line 36-38* column 7, line 48 -column 18, line 20 ---	1-7,11
A	US 5 763 548 A (MATYJASZEWSKI KRZYSZTOF ET AL) 9 June 1998 (1998-06-09) * column 6, line 30 ; column 6, line 37 - column 31, line 45 * column 3, line 33-54 ---	1-7,11
A	DE 195 20 875 A (BASF CORP) 14 December 1995 (1995-12-14) * abstract ; claim 1 * page 2, line 58 -page 4, line 20 ---	1-7,11
A	WO 00 55218 A (CALIFORNIA INST OF TECHN) 21 September 2000 (2000-09-21) * page 2, line 19 - page 3, line 7 * page 11, line 20-22; claims 1-33 ---	1-7,11
A	US 6 174 953 B1 (HUYBRECHTS JOSEF) 16 January 2001 (2001-01-16) * claims 1-5 * column 2, line 26 -column 4, line 31 ---	1-7,11
A	US 6 124 411 A (MATYJASZEWSKI KRZYSZTOF ET AL) 26 September 2000 (2000-09-26) * claims 1-16 * the whole document ----	1-7,11
A	WO 99 39731 A (SUPRATEK PHARMA INC ;ALAKOV VALERY Y (CA); BATRAKOVA ELENA V (US);) 12 August 1999 (1999-08-12) claims 1-21 -----	1-7,11